Editorial index for volume 30 1998

INDEX OF ARTICLES

Adjudication: Resolving construction industry disputes in the UK ... Apr p36
Alps, Tunnelling challenges in the ... Sep p20
Atlas Copco: keeping ahead of the game ... Sep p49
Australia: Providing Melbourne's missing links ... Jul p28
Australia: Top-down road tunnel built for Perth ... Jul p38
Austria's Sieberg Tunnel. Constructing (Alpine focus) ... Sep p28

Bangkok. No-dig is the answer for congested ... May p26
Barbados sewer micro challenges ... Dec p32
Bauma Preview ... Mar p41
Book Review: Geotechnical Baseline Reports ... Jan p40
Boston's Red Line metro tunnel. Instrumentation for ... Jun p23
Brazil: Serra da Mesa underground hydropower plant ... Apr p14
BTS: Concrete reinforcement with steel fibres ... Apr p39
BTS: Construction of the Copenhagen Metro ... Sep p58
BTS: Debate: 'This house is of the opinion that the Quality Assurance paperchase is cost effective' ... Jun p42
BTS: Jubilee Line Extension Project ... Mar p35
BTS: Reimbursement for tunnel workers ... Jan p38
BTS: Tunnels in Hong Kong ... Jul p34
BTS: Tunnelling at Malaysia's Pergau hydro project ... Dec p39

Canada: Lateral extension for Toronto's Metro ... Mar p46
Caverns & underground space: Rock engineering principles ... Oct p18
CERN Point 1, The design of (France/Switzerland) ... Oct p27
Chek Lap Kok Airport (Hong Kong site report) ... Jan p27
China: Seven EPBMs at work on the Shanghai Metro ... May p38
China: Slurry TBM drives road tunnel in Shanghai ... Mar p50
Colombia: Improving HEP development at Porce II ... Apr p21
Computers: Year 2000 and the millennium bug ... Jul p30
Concrete Technology: Casting out into Øresund ... Nov p36
Conveyors: Time to belt up ... Sep p67

Disc cutters: Development of a Mini-disc drill bit ... Nov p43
Disc Cutter Technology: Tunnelling in harder rock ... Apr p42
Drill+blast technology: Focus on quality tunnelling ... Jul p44

Engelberg. Driving a large tunnel in difficult ground at ... Mar p23
Fire Safety: Effects of fire on tunnel lining stability ... Oct p39
Fire Safety: Fire safety engineering and management of tunnels ... Jun p34
France: Mechanical precutting at Toulon ... Oct p34
France/Switzerland: The design of CERN Point 1 ... Oct p27

Geosynthetics: Effective underground sealing systems ... Mar p55
Geotechnical Baseline Reports (Book Review) ... Jan p40
Germany: Driving a large tunnel in difficult ground at Engelberg ... Mar p23
Girsberg Tunnel: Tunnel portion of Swiss bypass ... Dec p27
Gotthard base tunnel: planning and design (Alpine focus) ... Sep p24
Ground stabilisation in North America ... Jun p44

Hallandsås project. Solving the problems on the ... May p22
Hogsmill. New sewer tunnels in London Clay at ... Jun p38
Hong Kong, Mechanised tunnelling in ... Dec p24
Hong Kong site report: On track for Chek Lap Kok Airport ... Jan p27

Iceland: Harnessing the flood at Isafjordur ... Mar p17
Immersed tube retrofit, US ... Nov p22
India: Hard rock & concrete at Mumbai's undersea outfalls ... Jun p30
India - Site Report: Hi-tech tunnelling on the Konkan Railway ... Sep p39
Instrumentation & Monitoring: Automatic tunnel monitoring ... May p42
Interview with Dr Robert Mair, Expert vision: ... Sep p33
Isafjorour. Harnessing the flood at (Iceland) ... Mar p17
ITA Preview for São Paulo show ... Jan p21
ITA Profile: The fast developing role of the ITA ... Oct p48
ITA Working Group 15: Underground works and the environment ... Apr p32
Italy: Design & construction of a station on the Rome Metro ... Mar 27
Japan: Dial-Japan for exotic TBMs ... Apr p29
Japan: Building a two-diameter stormwater drain ... Jul p16
Japan: Rock behaviour of the Kazunogawa power cavern ... Oct p22
Japan: Two TBMs in one for Osaka power tunnel ... Jul p25
Japan: Triple circular face slurry shield at Tokyo Metro station ... Jul p20
Jubilee Line Extension Project (BTS report) ... Mar p35

Kazunogawa power cavern, Rock behaviour of the (Japan) ... Oct p22
Konkan Railway, Hi-tech tunnelling on the (India - Site Report) ... Sep p39

LA Metro Red Line North Hollywood Extension (Santa Monica) ... Jan p17
Lausanne hosts international No-Dig show ... May p35
Law: Creating financial security with bonds ... Jun p28
London Clay at Hogsmill, New sewer tunnels in ... Jun p38

Madrid, Geotechnical monitoring at ... Nov p31
Maintenance and repair underground, Coping with ... Nov p19
Mechanised tunnelling in Hong Kong ... Dec p24
Melbourne's missing links, Providing (Australian site report) ... Jul p28
Methane attack (Taiwan) ... Dec p35
Millennium bug, Year 2000 and the (Computers) ... Jul p30
Monitoring: Instrumentation for Boston's Red Line metro tunnel ... Jun p23
Mumbai's undersea outfalls. Hard rock & concrete at ... Jun p30

NATM in context ... Jan p41
Neural networks: Predicting settlement ... Dec p30
New tunnels from old:
Coping with maintenance and repair underground ... Nov p19
US immersed tube retrofit ... Nov p22
Victorian rail tunnels in need of rehabilitation ... Nov p26
No-Dig '98 preview: Lausanne hosts international No-Dig show ... May p35
No-dig is the answer for congested Bangkok ... May p26
North American Perspective: Heading off a crisis in confidence ... Jun p17
Norway: Underground and undersea in Norway ... May p16

Øresund, Casting out into ... Nov p36
Osaka power tunnel, Two TBMs in one for ... Jul p25

Pergau hydro project, Tunnelling at Malaysia's(BTS) ... Dec p39
Perth, Top-down road tunnel built for (Australia - site report) ... Jul p38
Peru: More tourists at Machu Picchu ... Apr p18

Queens Tunnel, The ... Jan p24

Reimbursement for tunnel workers ... Jan p38
Rock engineering principles ... Oct p18
Rockbolting practice, Current ... Oct p43
Rome Metro. Design & construction of a station on the ... Mar 27

Santa Monica Mountains, Tunnelling through the ... Jan p17
SGI tunnel linings - return of the Iron Age? ... Jan p48
Shanghai Metro. Seven EPBMs at work on the ... May p38
Shanghai. Slurry TBM drives road tunnel in ... Mar p50
Shotcrete support: NATM versus SCL ... May p31
Show previews: NAT '98 and Intertunnel (Asia) '98 ... Jan p46
Sieberg Tunnel, Constructing Austria's ... Sep p28
Small-bore tunnelling in the Bronx ... Jun p20
Stormwater drain, Building a two-diameter (Japan site report) ... Jul p16
Success stories under pressure (World projects round-up) ... Dec p16
Surface Plant: Advanced slurry treatment plant uses three stages ... Jan p50
Surveying: Tunnel alignment and lateral refraction ... Mar p58
Sweden (BTS Report): Solving the problems on the Hallandsås project ... May p22
Sweden: Gota Tunnel: an environmental project in

ANNUAL INDEX

central Gothenburg ..... May p19
Switzerland: Tunnel portion of Swiss bypass (Site report) ..... Dec p27
Taiwan: Methane attack ..... Dec p35
TBMs: Mechanised tunnelling in Hong Kong ..... Dec p24
Thailand: A mass rapid transit system for Bangkok ..... Jan p30
Thailand: Lam Ta Khong pumped storage project ..... Jan p34
Thailand: No-dig is the answer for congested Bangkok ..... May p26
Tokyo Metro, Triple circular face slurry shield at ..... Jul p20
Toronto's Metro. Lateral extension for ..... Mar p46
Toulon, Mechanical precutting at (France) ..... Oct p 34
Trenchless technology: Barbados sewer micro challenges ..... Dec p32
Tunnel lining stability, Effects of fire on ..... Oct p39
Tunnelling on through his 70s - Reuben Samuels ..... Jan p21

Underground works and the environment ..... Apr p32
US: Renovation of the Berry Street Tunnel ..... Apr p34
US: Small-bore tunnelling in the Bronx ..... Jun p20
Used plant & equipment: Cutting costs - not quality ..... Nov p47

Ventilation Part 1: Ventilating vehicular tunnels ..... Jul p40
Ventilation Part 2: Fans for vehicular tunnels ..... Sep p62
Victorian rail tunnels in need of rehabilitation ..... Nov p26
Virtual interactive modelling ..... Nov p40
World projects round-up ..... Dec p16

COMMENT

More options in 1998? ..... Jan p5
It's time to look around ..... Feb p3
Tunnelling as scapegoat ..... Mar p5
Cinderella site investigation ..... Apr p5
Building for the cities of the future ..... May p5
Information and the control of risk ..... Jun p5
Suffering from conference fatigue? ..... Jul p5
Confidence needs a contracts boost ..... Aug p3
Records reflect tunnelling vitality ..... Sep p5
Hiding our light under a bushel ..... Oct p5
People respond to a letter ..... Nov p5
Changing times, changing fortunes ..... Dec p5

AUTHORS

Aldrian, Dipl-Ing Dr mont W ..... Sep p28
Appuhn, Dick ..... Jan p34
Aquino, A R ..... Apr p14
Assis, A P ..... Apr 14
Atkinson, Danny ..... Jun p28
Bartoletti, John ..... Jun p20
Beveridge, J ..... Jan p41
Bird, J ..... Sep p67
Buechel, Gerard J ..... Jun p20
Chapman, Peter ..... Jul p34
Chouanard, Yves ..... Jan p50
Claasen, M ..... Apr p34
Constantin, B ..... Oct p34
Cory, W T W ..... Jul p40; Sep p62
Couchman, Barry ..... Dec p39
Cox, Andrew ..... Jul p34
Davies, Peter ..... Dec p39
Denman, David ..... Jul p34
Dodds, Phil ..... Jan p48
Duffaut, Pierre ..... Apr p18
Dunn, Jonathan ..... Dec p27
Durnad, J P ..... Oct p34
Earnshaw, Grant ..... Apr p39
Eddie, Colin ..... Apr p39
Ellis, Hollie L ..... Jun p20
Eskesen, S ..... Sep p58
Feldman, Alexander I ..... Jun p20
Fitzell, Trevor ..... Dec p32
Focaracci, Dr Eng Alessandro ..... Mar p27
Friant, Prof James ..... Nov p43
Gall, V ..... Apr p34
Graca, N G ..... Apr p14
Greenfield, Gary ..... Jun p17
Grimstad, Eystein ..... May p16
Gutierrez, J C ..... Apr p21
Haack, Dr Alfred ..... Oct p48
Haraldsson, Dr Hreinn ..... Mar p17
Hardarson, Bjorn ..... Mar p17
Hashash, Youssef ..... Nov p22
Haug, Ruth ..... May p16
Hough, Chris ..... Apr p36
Howley, John ..... Jan p17
Hudson, Prof John A ..... Oct p18
Iso, Akio ..... Jul p16
Jingsheng Shi, Dr ..... Dec p30
Johnson, Dr A ..... Mar p58
Jones, Maurice ..... Mar p46; Jun p38; Nov p47; Dec p16
King, John ..... Jan p38
Knight, Jack ..... Nov p26
Kovari, Prof Dr K ..... Sep p20
Koyama, Toshihiro ..... Oct p22
Kucker, Mike ..... Jun p20
Lance, G A ..... Oct p39
Launay, Jean ..... May p31
Lillevik, Stig ..... May p16
Ludwig, Bengt ..... May p19
Lunardi, Dr Eng Pietro ..... Mar p27
MacKenzie, Colin ..... Jan p38
Mannsbart, Germot ..... Mar p55
Marec, Michel ..... Nov p19
Martins Filho, G ..... Apr p14
McConnell, Mike ..... Dec p39
McCormack, Steve ..... May p35; Sep p33, 49; Nov p31
McGlyn, John ..... Dec p43
Mello Franco, A ..... Apr p14
Mikata, Mitsuo ..... Jul p16
Mothersille, Dr D K V ..... Oct p43
Nakata, Hiroshi ..... Jul p16
Nambu, Shigeki ..... Oct p22
New, Barry ..... Jan p40
Nord, Gunnar ..... Jul p44
O'Hana, Simon ..... Sep p58
Ortigao, Dr J A R ..... Dec p30
Page, Mike ..... Jan p21, 24, 46; Mar p23, 41; Apr p29
..... May p38; Jul p25;
Pakes, Ged ..... Sep p58
Parker, Chris ..... Dec p39
Perez-Cerezco, Julia ..... Apr p32
Powell, Dr D B ..... Jan p41
Price, Gerwyn ..... May p42
Rock, Tony ..... Apr p39
Rostami, Jamal ..... Apr p42
Russell, Eric ..... Nov p40
Sachs, Dipl-Ing M ..... Sep p28
Schmidt, Birger ..... Nov p22
Schubert, Dipl-Ing Dr mont P ..... Sep p28
Shipp, Martin ..... Jun p34
Short, Malcolm ..... Jul p28
Simons, Sam ..... Dec p43
Solana, Al ..... Jun p20
Stattin, Jan ..... May p22
Stille, Prof H ..... May p22
Stimac, Tom ..... Nov p22
Sturk, Dr Robert ..... May p22
Tam, Angela ..... Jan p27; Dec 24
Thone, M ..... Oct p34
Umney, Anthony ..... Sep p58
Vandewalle, Marc ..... Apr p39
Varley, Dr Paul ..... Oct p27
Wallis, Shani ..... May p26; Jun p30; Jul p38; Sep p39; Dec p35
Wardle, Irene ..... May p42
Watson, Kathy ..... Jul p30
Weerasinghe, Dr R B ..... Oct p43
Wenbo, Zhou ..... Mar p50
Wheeler, James R ..... Jun p44
Xuexin, Hua ..... Mar p50
Yamamoto Akira, ... Jan p30
Zhicheng, Ding ..... Mar p50

. May p16
. . Apr p21
. Oct p48
. Mar p17
. Mar p17
. Nov p22
. May p16
. Apr p36
. Jan p17
. Oct p18
. . Jul p16
. Dec p30
. Mar p58
; Dec p16
. Jan p38
. Nov p26
. Sep p20
. Oct p22
. Jun p20
. Oct p39
May p31
May p16
May p19
. Mar p27
. Jan p38
. Mar p55
. Nov p19
. Apr p14
. Dec p39
Nov p31
Dec p43
. Apr p14
. Jul p16
. Oct p43
. Jul p16
. Oct p22
. Jan p40
. Jul p44
Sep p58
Dec p30
; Apr p29
; Jul p25;
Sep p58
Dec p39
Apr p32
Jan p41
May p42
Apr p39
Apr p42
Nov p40
Sep p28
Nov p22
Sep p28
Jun p34
. Jul p28
Dec p43
Jun p20
May p22
May p22
Nov p22
May p22
; Dec 24
Oct p34
Sep p58
Apr p39
Oct p27
Dec p35
May p42
Jul p30
Oct p43
Mar p50
Jun p44
Mar p50
Jan p30
Mar p50